VII. OTHER ENVIRONMENTAL CONSIDERATIONS A. SIGNIFICANT UNAVOIDABLE IMPACTS

1. SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. Following is a summary of the impacts that were concluded to be significant and unavoidable. These impacts are also described in detail in Chapter V, Environmental Impact Analysis, of this EIR.

a. Air Quality

Although implementation of the project features and mitigation measures described in Section V.B, Air Quality, of this EIR will reduce construction air quality impacts, activities related to construction of the project will continue to exceed the South Coast Air Quality Management District (SCAQMD) daily emission thresholds for regional NO_X , CO, PM_{10} , and ROC. In addition, localized PM_{10} impacts will continue to exceed the incremental construction PM_{10} significance threshold during some phases of construction. As such, construction of the PacifiCenter project will have a significant and unavoidable impact on regional and local air quality. These impacts, however, will be for short durations and, given that construction will be distributed throughout a large site, impacts at any given location will be relatively short-term.

During the operational phase the project will result in a net increase in regional emissions of CO, ROC, NO_X , and PM_{10} from the operation of both stationary and mobile sources. Project features and mitigation measures will reduce the potential air quality impacts of the project to the degree technically feasible, but emissions will remain above SCAQMD significance thresholds. It is important to note, however, that the threshold of significance for air quality is based on air pollution output alone and is not adjusted to reflect relative efficiency. As a result, a small but highly inefficient development may have less than significant emissions while a large but highly efficient project may exceed the threshold. Thus, while the PacifiCenter will be expected to generate less air pollution than the sum of the smaller projects on many other sites that will absorb the same amount of total development, regional air quality impacts resulting from operation of the proposed project will be considered significant and unavoidable.

In addition, an increase in emissions associated with the proposed project will contribute to region-wide emissions on a cumulative basis. Although feasible mitigation measures will be employed, the project's contribution to cumulative air quality impacts will remain significant and unavoidable.

b. Cultural Resources

A survey of the site identified a grouping of 18 contributing buildings and two other features as a potential historic district eligible for the National Register of Historic Places, the California Register of Historical Resources, and for local designation as a City of Long Beach historic district. The ongoing demolition activities necessitated by compliance with the mandated remediation program will remove all contributing and non-contributing resources with the potential exception of Building 15 within the Boeing Enclave, which may ultimately be demolished as part of the project. Demolition of Building 15 will not be a significant project impact because this structure does not appear individually eligible for the National Resister, California Register or local landmark designation and because upon its demolition, all other resources contributing to the potential district will already have been removed to provide for the remediation program. However, with regard to cumulative impacts, if Building 15 remains and is removed as part of the project rather than as part of the ongoing remediation program, the project will contribute to a significant, unavoidable cumulative impact on historic resources.

c. Noise

Pile driving activities associated with construction of the PacifiCenter project will be expected to generate noise levels well above existing ambient levels. These noise levels will be in excess of the 5 dBA incremental significance threshold. However, such noise levels will be experienced for short durations and, given the size of the construction area, will be greatly reduced for much of the time at adjacent sensitive locations due to construction staging. In addition, project features and mitigation measures outlined in Section V.I, Noise, of this EIR will further reduce construction noise levels. Nonetheless, noise impacts related to pile driving during construction will be considered significant and unavoidable.

Traffic noise levels associated with the project and all of the proposed traffic mitigation measures will be less than significant for all roadway segments with the exception of Conant Street east of Lakewood Boulevard (Roadway Segment No. 8), which will increase by 7.0 dBA. This roadway segment is bordered by parking facilities and the Boeing 717 Assembly Facility. While noise levels associated with project traffic at this

roadway segment will result in a significant and unavoidable impact, no sensitive receptors will be impacted.

If A Street is reconfigured in the western portion of the project site to be adjacent to the Golf Course, traffic noise on this segment will exceed the 5 dBA significance threshold. This excessive noise increase is due to the fact that the roadway does not currently support a large amount of traffic. Nonetheless, this noise increase will result in a significant and unavoidable impact.

It is not anticipated that future construction will occur on properties adjacent to the project site simultaneously with construction of the proposed project. However, in the event that such simultaneous construction does occur, noise levels could be cumulatively significant at a sensitive receptor location. Since receptors located immediately adjacent to the project site will occasionally experience project-related construction noise levels in excess of the 5 dBA incremental construction significance threshold, this scenario will be considered to result in significant cumulative construction noise levels.

Finally, cumulative increases in predicted noise levels due to off-site traffic with ambient growth including the project and related projects, as well as all proposed traffic mitigation, will be significant for the portion of Conant Street east of Lakewood Boulevard (Roadway Segment No. 8). In addition, if a street is located adjacent to the golf course, significant cumulative traffic noise impacts at this location could occur. However, as stated above, no sensitive residential receptors will be impacted. Nonetheless, the cumulative increase in traffic related noise on this street segment will be significant and unavoidable.

d. Police Protection

In order to maintain the current officer to population service ratio in the City of Long Beach of 2.0 officers per 1,000 residents and work toward the goal of providing 2.5 officers per 1,000 residents, approximately nine new officers will be required at project buildout. Additional outlays will also be needed for equipment to support these officers and for annual maintenance of this equipment. Furthermore, although the portion of the project site located within the City of Lakewood will not generate residents, the Sheriff's Department has indicated concern related to an increase in demand for services as a result of additional employees and vehicles in the area surrounding the project site. While annually recurring project generated General Fund revenue could be sufficient to fund expenditures associated with staffing and equipment for project induced demand for police protection services, the allocation of such revenue to a specific service cannot be guaranteed. Therefore, a potentially significant impact to police protection services in the Cities of Long Beach and Lakewood could occur as a result of the project.

Cumulative growth in the area surrounding the project site will also result in a demand for additional police protection services in the Cities of Long Beach and Lakewood. Similar to the proposed project, any future projects will likely include specific features designed to reduce impacts on police protection services and will be evaluated on an individual basis to determine appropriate measures that address additional demand. While the need for additional police protection services associated with cumulative growth may be addressed through each City's annual budgeting process and capital improvement programs, the allocation of project-generated revenue to a specific service cannot be guaranteed. Therefore, the project's contribution to a cumulative impact in regard to police protection in the Cities of Long Beach and Lakewood could be significant.

e. Fire Protection and Emergency Medical Services

Additional fire protection equipment may be necessary to provide for the building heights and uses proposed as part of the project. In addition, the project will result in an increase in fire prevention inspection activity. The Long Beach Fire Department (LBFD) has indicated that the proposed project will necessitate the addition of a truck company (i.e., a truck ladder engine, personnel and associated equipment) to safely and effectively meet the adequate levels of service and response times. In addition, the project will result in a demand for an additional one-half full time equivalent (FTE) fire inspection staff person, and one FTE plan checker until completion of the project. Annually recurring project-generated General Fund revenue will be sufficient under any proposed development scenario to fund the LBFD expenditures associated with this incremental demand for fire personnel and equipment generated by the project. Therefore, if project-generated revenue were not allocated to the provision of fire protection equipment and personnel in the City of Long Beach, a potentially significant impact could occur.

Similar to the proposed project, any future projects will likely include specific features designed to reduce impacts on fire protection and emergency medical services. In addition, future projects will be evaluated on an individual basis to determine appropriate mitigation measures to address new demand. Furthermore, the need for additional fire protection and emergency medical services associated with cumulative growth may be addressed through each City's annual budgeting process and capital improvement programs, should the City of Long Beach or City of Lakewood determine that service improvements are necessary. Nonetheless, as the allocation of project-generated revenue to a specific service cannot be guaranteed, the combined cumulative impact associated with the project's incremental effect and the effects of other projects on fire protection and emergency medical services in the City of Long Beach and City of Lakewood could be significant.

f. Libraries

The increase in the residential population of the Ruth Bach Library's service area that will occur as a result of the project will reduce the number of items available per resident by approximately 0.19 items per person, resulting in approximately 1.34 items per person, which is below the goal of 2.1 items per capita. Furthermore, with the addition of the project, the amount of floor area per person at the Ruth Bach library will be reduced to approximately 0.19 square feet per resident, which is less than the City's goal of 0.25 square feet per resident. The City of Long Beach Public Library has indicated that an approximately 13 percent workload increase at the Ruth Bach Library will be necessary and that the book collection at this Library will have to be expanded proportionally to meet the 2.1 items per capita goal. Annually recurring project-generated General Fund revenue will be sufficient to fund the necessary library expenditures associated with additional demand from the project. However, even in instances where a project is expected to generate a significant annual General Fund surplus over forecast expenditures, that revenue stream may not be pre-allocated to a specific purpose. As such, if the projectgenerated revenue were allocated to other needed municipal purposes other than to the provision of additional resources at the Ruth Bach Library, a potentially significant and unavoidable impact associated with demand for library facilities by the project-generated residential population in the City of Long Beach will occur.

The need for additional library resources associated with cumulative growth may be addressed through the City's annual budgeting process. However, as described above, the allocation of project-generated revenue to a specific service cannot be guaranteed. Therefore, the combined cumulative impacts to libraries within the City of Long Beach associated with the project's incremental effect and the effects of other projects in the area could be significant.

g. Traffic

Of the 55 study intersections that will be significantly impacted by the project, 52 will be reduced to below a level of significance with implementation of proposed mitigation measures. However, significant and unavoidable impacts will remain at the intersections of Carson Street and Lakewood Boulevard, Conant Street/B Street and Lakewood Boulevard, and Spring Street and Lakewood Boulevard.

The project will increase traffic volumes by more than 500 net daily trips and 50 net peak hour trips on three of the analyzed residential street segments. Mitigation measures requiring the funding of neighborhood traffic management measures will reduce the impact on these roadways to a less than significant level. However, should the jurisdiction(s) with

authority to implement these measures fail or be unable to implement acceptable and adequate measures, project impacts on these three residential street segments will be significant and unavoidable.

Unacceptable operating conditions are projected for the year 2020 without the project during one or both peak hours at 70 of the study intersections. The future with project plus mitigation condition will result in an overall improvement to most of the study intersections when compared with future without project conditions due to roadway improvements that will be completed as mitigation for the project. Thus, the project will not only mitigate all but three of the project's intersection impacts, but will also introduce at least some improvement at many of studied intersections relative to conditions anticipated in 2020 without the project. However, although overall traffic benefits will occur with implementation of the PacifiCenter project, seven of the intersections will experience worse conditions with the proposed project plus mitigation measures as compared to the future no project conditions. Thus, the project will contribute to significant and unavoidable cumulative impacts at these intersections.

In terms of impacts to the regional transportation system, the project will fund or cause to be funded extensive area-wide mitigation measures on the surface street system, which will have much greater benefit than impact on the regional system. In addition, voluntary improvements to the Cherry Avenue on-ramp to the I-405, which are included as part of the project, will further reduce cumulative impacts to the regional system. However, although the credit/debit analysis indicates that the project will result in an overall benefit to the regional system, since the project will result in a D/C ratio increase of 0.020 or more with a final LOS of F on eight of the nine I-405 mainline segments analyzed, the project's impacts and the project's contribution to cumulative impacts on these freeway segments is considered significant and unavoidable.

With regard to construction traffic, while traffic impacts associated with construction worker and haul truck trips will be short-term and temporary, they are considered to be a significant and unavoidable impact. In addition should several projects in the vicinity of the project be constructed at the same time, the project will also contribute to a short-term significant cumulative impact.

h. Solid Waste

The project itself will not exacerbate landfill shortages in the region. However, the increase in solid waste disposal from SCAG projected growth in the Cities of Long Beach and Lakewood will represent approximately 1.7 percent of the solid waste stream flowing into major County landfills through the year 2020. Therefore, when considering the project

together with other future growth expected by SCAG through 2020, due to the recognized long-term capacity shortages at the regional landfills, the cumulative impacts associated with solid waste disposal will be significant and unavoidable.

2. REASONS WHY THE PROJECT IS BEING PROPOSED, NOTWITHSTANDING SIGNIFICANT UNAVOIDABLE IMPACTS

In addition to identification of the project's significant unavoidable impacts, Section 15126.2(b) of the CEQA Guidelines also requires that the reasons why the project is being proposed, notwithstanding these impacts, be described. The reasons why this particular project has been proposed are grounded in a comprehensive listing of project objectives included in Section III, Project Description, of this EIR. While land use planning and real estate development must always contemplate the implications of adverse change, their fundamental purposes are to beneficially supply an array of needed land use products in a manner that optimizes environmental as well as economic realities. The PacifiCenter project is proposed in anticipation of expected commercial and residential demand in the subregion which will locate somewhere therein, whether his project is constructed or not. The PacifiCenter site is much larger than the majority of properties available for development or redevelopment in the subregion and, as a result, it can accommodate much larger expectations than the majority of other sites. However, it can also take advantage of appreciable environmental economies of scale, which promote operational efficiency not available to the same amount of total development distributed among many smaller sites.

Due to appreciable internal trip capture between the various uses comprising PacifiCenter, traffic generation to and from the project site will be less than the sum of trips from an array of smaller properties hosting the same amount of total development. Moreover, the project traffic mitigation program is expected to improve operating conditions at the majority of studied intersections relative to future conditions anticipated without the project. These trip conservation and mitigation features also produce efficiencies with regard to the air quality and noise issues which relate closely with traffic. Similarly, utility infrastructure can be more efficiently provided when demand is concentrated. Thus, even though the project does have significant, unavoidable impacts on air quality and noise during construction, and on regional air quality, and cumulative traffic following construction, these impacts are believed to be cumulatively less than if demand expected to be met at PacifiCenter were to be satisfied through smaller developments that are more constrained in their planning options. Similarly, a larger, more concentrated development like PacifiCenter can more comprehensively mitigate those impacts that will occur than many smaller, disconnected programs.

In addition to the environmental reasons why the project has been proposed cited above, there are economic and urban planning reasons. The PacifiCenter project is proposed to return economic vitality to the project site. This property, historically a major regional employment center, has accounted for nearly 45 percent of the loss in employment experienced in Long Beach and Lakewood since 1990. The proposed project will restore a sizeable fraction of earlier employment capacity. While the City of Long Beach has experienced a net loss in housing stock since 1990 and the region is forecasting housing shortages, this project provides a large infusion of housing where it was not previously contemplated. The provision of housing, up to 2,500 new units, is believed to outweigh the impacts of constructing and occupying such housing. In addition, placing employment and residential uses in a mixed-use urban setting designed to accommodate the needs of employment and residential uses with supporting retail and recreational amenities is expected to provide a model for local development in the future. Finally, although significant impacts associated with public services will occur should general fund revenue not be allocated to fund certain public services, the economic benefits that this project will produce for both the Cities of Long Beach and Lakewood can be expected to place both cities in position to afford more public services and amenities than will otherwise be available.

VII. OTHER ENVIRONMENTAL CONSIDERATIONS B. POTENTIAL SIGNIFICANT EFFECTS ASSOCIATED WITH IMPLEMENTATION OF PROJECT MITIGATION MEASURES

Section 15126.4(d) of the CEQA Guidelines requires that, "If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed." With regard to this section of the CEQA Guidelines, the potential impacts that could result from the implementation of each mitigation measure contained in the Mitigation Monitoring Program (MMP) presented in Appendix A were evaluated. The following provides a discussion of the potential impacts that could occur as a result of the implementation of the measures by topical area.

1. AESTHETICS

Mitigation measures contained in Section V.A, Aesthetics, require the implementation of the project as defined in Section III, Project Description. For example, Mitigation Measure V.A-1 and V.A-2 ensure that the setbacks and heights as defined in the Project Description will be implemented. Mitigation Measures V.A-5, V.A.6, and V.A.10 address lighting and require that light be shielded to protect off-site uses from glare and light impacts and that lighting be in compliance with all applicable Airport Land Use Plan Safety Policies and FAA regulations. Other measures address the screening of the Enclave and the electrical substation, as analyzed in the EIR. Finally, Mitigation Measure V.A-7 prohibits the use of glass with over 25 percent reflectivity to avoid glare. Implementation of these measures will not result in significant impacts.

2. AIR QUALITY

Mitigation Measures V.B-1 through V.B-15 address construction and include standard measures, such as maintenance of internal site roadways used for construction, proper tuning and maintenance of construction equipment, limitation of travel speeds on internal roadways, staging areas, times for deliveries, and use of alternative fuels. While water may be used to reduce fugitive dust impacts, the potential impact on the water supply has been considered in the analysis of the demand for water during construction

activities presented in Section V.M.2, Water, in this EIR. No significant effects will occur from the implementation of the mitigation measures regarding air quality during construction.

With regard to operation, Mitigation Measures V.B-16 through V.B-27 address four sources of operational emissions: (1) service and support facilities; (2) natural gas consumption and electricity production; (3) building materials, architectural coatings, and cleaning solvents; and (4) warehouse/distribution facilities. The measures require compliance with applicable requirements, such as obtaining permits for point source facilities, compliance with California Title 24 Energy Efficiency standards, and compliance with applicable SCAQMD rules and regulations. In addition, Mitigation Measures V.B-21 through V.B-27 are specific to warehouse/distribution uses permitted as accessory uses and require operational measures to reduce truck emissions. No significant effects will occur from the implementation of the mitigation measures regarding air quality during operation.

3. CULTURAL RESOURCES

Mitigation Measure V.C-2, which requires trenching for archaeological resources, could result in significant effects associated with air quality and noise. However, the air quality and noise analyses used conservative assumptions regarding hours of equipment operation and number of equipment used per day and, therefore, account for activities such as required trenching. Therefore, no significant effects will result from the implementation of this measure. The remaining measures, which include a pedestrian survey of the areas demolished in connection with the remediation program, archaeological data recovery (in the event that resources are found) and the recordation of historic resources, will not result in significant impacts.

4. GEOLOGY AND SOILS

No significant effects will occur as a result of the two mitigation measures regarding geology and soils since the measures require the preparation of geotechnical studies for each building and grading plans to result in grades that are compatible with streetscape grades and to address potential soil erosion.

5. HAZARDS AND HAZARDOUS MATERIALS

No significant impacts will result from the implementation of the mitigation measures contained in this section as the measures address project development relative to the on-site remediation, processing of applications and agreements with regard to the airport, the prohibition of buildings in the RPZ, and measures to reduce airport-related hazards.

6. HYDROLOGY

No significant effects will result from the implementation of the mitigation measures regarding hydrology as the two measures require adequate sizing of storm drains and that installation be completed in accordance with applicable requirements. The installation of infrastructure will occur during project construction and therefore, has been analyzed as part of the project in this EIR.

7. WATER QUALITY

No significant effects will result from the implementation of the mitigation measures regarding water quality, as these measures require that the project conform to the NPDES regulations and that a SUSMP be developed, which serve to protect water quality.

8. LAND USE AND PLANNING

No significant effects will result from the implementation of the mitigation measures regarding land use and planning as these measures ensure the implementation of the project as analyzed in this EIR and ensure compliance with the City of Long Beach Land Use Element.

9. NOISE AND VIBRATION

Mitigation Measures V.I-1 through V.I-13 address potential noise and vibration impacts during construction. These measures require compliance with the City of Long Beach and City of Lakewood ordinances regarding hours of construction, address construction scheduling and staging, require the use of muffler exhaust systems on

equipment, limit engine idling, require screening with temporary fencing, and the use of pile shields. The implementation of these construction measures will not result in significant effects.

With regard to operation, Mitigation Measures V.I-14 through V.I-20 provide measures to ensure that noise levels will be less than significant during project operation. These measures include the installation of noise insulation in residential buildings, sequencing of development, and screening of the substation and mechanical equipment. No significant effects will result from the implementation of the mitigation measures regarding operational noise.

10. EMPLOYMENT, POPULATION, AND HOUSING

No significant employment, population and housing impacts associated with the project will occur. Therefore, no mitigation measures are required.

11. POLICE

The two mitigation measures contained in this section require the provision of information relative to site layout and development to the Police Department to facilitate police response and the incorporation of crime prevention features. The crime prevention features include the installation of lighting, which has been analyzed in Section V.A., Aesthetics. Measures to preclude impacts from lighting are included in Section V.A., Aesthetics. Therefore, no significant effects will result from the implementation of mitigation measures regarding police services.

12. FIRE PROTECTION

No significant effects will result from the implementation of the mitigation measure regarding fire protection as this measure requires review by the appropriate Fire Departments prior to issuance of a building permits, incorporation of emergency access provisions as part of the project, and payment of fire inspection fees.

13. SCHOOLS

No significant effects will result from the implementation of the mitigation measure contained in this section, as the measure requires the payment of development fees.

14. PARKS & RECREATION

No significant effects will result from the implementation of the mitigation measure contained in this section, as the measure requires the provision of active open space on the project site, which has been analyzed as part of the project in this EIR.

15. LIBRARIES

Since the project will not result in significant impacts to libraries, no mitigation measures are required.

16. TRANSPORTATION/CIRCULATION AND PARKING

Mitigation Measures V.L-1 through V.L-3 require funding for a state-of-the art traffic signal system, such as an Adaptive Traffic Control System (ATCS). No significant effects will result form the implementation of these measures.

Mitigation Measures V.L-4, V.L-5, V.L-6, V.L-7, V.L-8, V.L-10, V.L-11, V.L-12, V.L-13, V.L-14, V.L-15, and V.L-17 require physical improvements, such as removing and shifting raised islands, widening a roadway segment, installing a physical measure, or installing a traffic signal. Mitigation Measure V.L-8 may necessitate some right-of-way acquisition. These measures will require varying levels of construction activities, which could result in air quality, noise and traffic impacts. These transportation measures will be implemented over time as required by the phasing program established in the Traffic Impact Study (refer to Appendix Q) and summarized in Section V.L, Transportation/ Circulation and Parking. As these improvements are designed and implemented, appropriate construction practices intended to minimize impacts will be required. For example, the implementation of best management practices with regard to erosion, the watering of construction sites, the use of properly operating equipment, and the use of noise reduction devices will minimize environmental impacts. In addition, traffic flow during construction of the improvements will be considered by the appropriate agency.

Mitigation Measures V.L-7, V.L-8, V.L-9, V.L-11, and V.L-14 will result in the removal of on-street parking spaces. The traffic study includes an analysis of the potential impacts from the implementation of these measures and the removal of parking. Mitigation Measure V.L-9 will result in the removal of up to 37 spaces, including nine commercial (yellow zone) spaces, on Bixby Road adjacent to commercial uses. There appear to be sufficient off-street spaces to satisfy parking requirements, with the possible exception of delivery/service needs. Therefore, removal of these spaces could result in a significant and unavoidable impact. Mitigation Measure V.L.14 will require the removal of approximately 12 spaces on Cherry Avenue and 24 spaces on Cover Street adjacent to commercial and industrial uses. Some of these uses may not have sufficient off-street capability to satisfy parking requirements. Therefore, removal of these on-street parking spaces could result in a significant and unavoidable impact. No feasible mitigation measures have been identified to reduce these potentially significant impacts of the removal of on street parking on Bixby Road, Cherry Avenue and Cover Street.

Mitigation Measure V.L-16 requires the implementation of a Transportation Demand Management (TDM) Program, which will not result in a significant effect. Mitigation Measure V.L-18 requires funding to administer neighborhood traffic management measures. Mitigation Measure V.L-19 requires consultation with public transit providers. As these two measures do not include physical improvements, no significant effects will occur. Mitigation Measure V.L-20 requires the installation of bike lanes within the project site. This improvement has been analyzed as part of the project. Mitigation Measure V.L-21 requires an analysis with regard to shared parking. Such an analysis will not result in a significant effect.

17. WATER

Mitigation Measure V.M.1-1 and Mitigation Measure V.M.1-3 require that water infrastructure improvements be completed in accordance with City and County requirements. Mitigation Measure V.M.1-2 and Mitigation Measure V.M.1-3 also require the coordination of the installation of water systems with project development and on-site street improvements. Finally, Mitigation Measure V.M.1-4 requires compliance with State water conservation measures. No significant effects will result from the implementation of the mitigation measures contained in this section as the measures result in compliance with applicable regulations and the conservation of water.

18. SEWER

Implementation of the PacifiCenter project will result in less than significant impacts on sewer service. Two mitigation measures are provided to ensure implementation of the project as described in the EIR. No significant effects will result from the implementation of these measures since they have been analyzed as part of the project in this EIR.

19. SOLID WASTE

No significant effects will result from the implementation of the two mitigation measure contained in this section as the measures require the provision adequate storage space for the collection and loading of recyclable materials and waste collection points throughout the site to encourage recycling as well as the implementation of a program to divert 30 to 50 percent of the waste generated by on-site commercial uses. These measures have been analyzed as part of the project in this EIR.

20. ENERGY

Mitigation Measure V.M.4-1 and Mitigation Measure V.M.4-3 require the installation of utility infrastructure, including gas meters, in accordance with applicable regulations. Mitigation Measure V.M.4-2 requires coordination with Southern California Edison with regard to the proposed substation. The potential impacts from the substation have been analyzed as part of the project in this EIR. The mitigation measures regarding energy will not result in significant secondary effects.

Conclusion

In conclusion, each of the mitigation measures has been considered to determine if significant effects will result from the implementation of the measures. While the majority of the mitigation measures will not result in significant effects on the environment, Mitigation Measures V.L.-9 and V.L-14 will result in potentially significant and unavoidable impacts due to the removal of on-street parking that will occur as a result of the implementation of these measures.

VII. OTHER ENVIRONMENTAL CONSIDERATIONS C. SIGNIFICANT IRREVERSIBLE CHANGES

Section 15126.2(c) of the CEQA Guidelines requires that significant irreversible environmental changes that would be caused by implementation of a proposed project be evaluated to ensure that such changes are justified. Irreversible changes include the use of nonrenewable resources during the construction and operation of a project to such a degree that the use of the resource thereafter becomes unlikely. A significant environmental change can result from a primary and secondary impact (such as a highway improvement that provides access to a previously inaccessible area) that generally commits future generations to similar uses. Finally, irreversible environmental change can also result from environmental accidents associated with the project.

Construction of the PacifiCenter project will result in a commitment of limited, slowly renewable, and nonrenewable resources. Such resources will include certain types of lumber and other forest products, the raw materials in steel, metals such as copper and lead, aggregate materials used in concrete and asphalt such as sand and stone, water, petrochemical construction materials such as plastic, and petroleum based construction materials. In addition, fossil fuels used in construction vehicles will also be consumed. Project construction will also result in an increased commitment of public maintenance services such as waste disposal and treatment. Operation of the PacifiCenter project will involve the ongoing consumption of limited, nonrenewable, and slowly renewable resources such as natural gas and electricity, petroleum based fuels, fossil fuels, and water. Energy resources will be used for heating and cooling of buildings, transporting people and goods to, from, and within the project site, heating and refrigeration for food storage and preparation, heating and cooling of water, and lighting. implementation of the project is projected to result in a peak electrical demand of approximately 32.6 megawatts (MW) and an annual demand of 193,629 MWh. Although this increased demand represents an increase when compared with existing conditions, this increase will be less than significant and will be slightly less than the demand for electricity generated by the site when it had a much greater occupancy. With regard to natural gas, the project will result in an increase of 32.9 million cu. ft./mo. of natural gas. Although this represents an increase from existing natural gas consumption, it will not be a significant impact. In addition, Title 24 of the California Administrative Code will require conservation practices that will limit the amount of energy consumed by the project. Nevertheless, the use of such resources will continue to represent a long-term commitment of essentially nonrenewable resources.

The project consists of the redevelopment of a 261-acre industrial site. The site is located in a built out area. As such, while the PacifiCenter project will commit the project site to particular land uses, it will not cause irreversible changes to previously undeveloped land.

As discussed in Section V.E, Hazards and Hazardous Materials, of this EIR, the potential for significant and irreversible damage relating to hazards and hazardous materials exists during the construction and operation of the proposed project. In terms of hazardous materials, the use of such materials will continue on-site. Hazardous materials will be used, handled, stored, and disposed of in accordance with applicable government regulations and standards, which will ensure that impacts will be less than significant. These regulations and standards will further serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials. Development in close proximity to the Airport could pose other hazards associated with the construction of buildings or structures near airport runways. However, as discussed in Section V.E, Hazards and Hazardous Materials, compliance with FAA and local air safety standards together with implementation of mitigation measures will ensure that potential airport-related hazards will be less than significant and will not result in significant irreversible changes.

The commitment of the limited, slowly renewable, and nonrenewable resources required for the construction and operation of the PacifiCenter project will limit the availability of these resources for future generations or for other uses during the life of the project. However, continued use of such resources is consistent with regional and local growth and anticipated change in the area. No other significant irreversible changes will occur as a result of project implementation.

VII. OTHER ENVIRONMENTAL CONSIDERATIONS D. GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that an EIR analyze growth-inducing impacts of a project. Growth-inducing impacts are characteristics of a project that could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the area surrounding a project site. Impacts associated with the removal of obstacles to growth as well as the development of facilities that encourage and facilitate growth are considered to be growth-inducing. However, as stated in the CEQA Guidelines, it is not to be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The proposed project consists of the development of the 261-acre PacifiCenter site. As discussed in Section III, Project Description, the project will provide for the replacement of over five million square feet of research and development (R&D), office, warehousing, manufacturing, and other aviation-related floor area previously occupied on the project site with new R&D, light industrial, warehouse, office, retail, hotel, residential, aviation-related, and ancillary uses. These new uses will include a maximum of 2,500 residential units, 3.3 million square feet of commercial uses, and 400 hotel rooms. In addition, the PacifiCenter project will provide for the potential continuation of a small amount of aviation-related uses and an electrical substation.

The project will provide for the redevelopment of the PacifiCenter site and will, thus, by its very nature, encourage both economic and population growth. As summarized below, and discussed in detail in Sections V.J.1, Employment, and V.J.3, Housing, such growth will be within the forecasts for the Cities of Long Beach and Lakewood, the Gateway Cities subregion, and Los Angeles County. Furthermore, as discussed in Section V.H, Land Use and Planning, growth associated with the project will serve to further certain goals and policies as set forth in the General Plans of the Cities of Long Beach and Lakewood, and the Long Beach 2010 Strategic Plan. Specifically, the project will maximize the development and economic potential of the PacifiCenter property, thereby enhancing a major employment center. Employment opportunities associated with the project will help to reverse the trend of local and regional job losses. Furthermore, growth associated with the project will make a positive contribution toward the jobshousing balance in the area and will create job opportunities for the local labor force while providing a variety of residential types to accommodate the needs of various employees. The project will provide a mix of land uses in a live, work, and play environment that

includes new infrastructure and amenities to attract and support quality commercial tenants and a stable residential area. Finally, the project will strive to optimize the value of existing property no longer in use or needed for aircraft manufacturing by balancing reuse opportunities while creating significant employment and housing. In meeting these goals, the project will directly and indirectly effect growth in construction and permanent employment, growth in the economy, population growth, and growth in the demand for certain community services. The anticipated growth and associated effects resulting from implementation of the PacifiCenter project are discussed throughout Section V, Environmental Impact Analysis, and are summarized below.

1. GROWTH ASSOCIATED WITH PACIFICENTER

As discussed in Section V.J.1, Employment, of this EIR, the project will result in a net increase of a maximum of 13,442 employees at project buildout when conservatively assuming that nearly all of the Commercial area of the site will be occupied by office uses. Of this maximum employment growth, it is estimated that up to 847 employees will be located within the City of Lakewood and the remaining employees will be located in the City of Long Beach. This growth in employment represents 48 percent of the employment growth projected for the City of Long Beach, 31 percent of the employment growth projected for the City of Lakewood, 12 percent of the anticipated employment growth in the Gateway Cities subregion, and 2 percent of the employment growth projected for Los Angeles County. These workforce estimates will thus be within the current growth projections for the City of Long Beach, City of Lakewood, the Gateway Cities subregion, and the County of Los Angeles.

In addition, construction of the PacifiCenter project will result in approximately 3,832 construction jobs over the buildout period of the project. This represents less than 1 percent of estimated annual countywide construction employment. This number of construction-related employees will not result in growth-inducing impacts in terms of an increased demand for housing or services within the project vicinity, as construction workers are temporary employees and do not typically relocate to a construction site since the length of time spent on such jobs is limited.

The project will include the construction of up to 2,500 new housing units within the City of Long Beach, resulting in direct growth-inducing impacts in the area. However, this number represents approximately 9 percent of the forecasted growth for the City and is within the official forecasted estimates for 2020. In addition to the direct increase in housing units, the project will result in an indirect effect on local housing demand due to the increase in employment on-site. Based on assumptions discussed in Section V.J.2,

Housing, of this EIR, the project could induce a maximum average of up to 155 new project-related households to move to the Long Beach/Lakewood area (within a five-mile radius of the project site) each year, excluding those that will live on-site. Assuming the low 2000 vacancy rates will continue in the Cities of Long Beach and Lakewood, 6,949 housing units are predicted to be available on an annual basis in Long Beach and Lakewood, which together comprise only 78 percent of the housing stock within a 5-mile radius of the project site. The demand for 155 housing units will represent only 2.2 percent of the 6,949 housing units expected to be available. Thus, although the vacancy rates within Lakewood and Long Beach are expected to remain low, the indirect demand for housing units is expected to be accommodated by existing housing units. As such, implementation of the project will not generate an indirect demand on housing requiring additional housing units to be built.

2. PUBLIC SERVICES

Additional residents within a city can indirectly impact services such as schools, open space, and libraries. The 2,500 housing units that will be developed under the PacifiCenter project will generate approximately 242 students within the Long Beach Unified School District (LBUSD). The indirect increase in population resulting from households that are induced to move as a result of the project will not be expected to generate additional students as such households will likely replace existing households. The increase in students within the LBUSD will be less than significant with the payment of school impact fees by the project. The payment of such fees will provide additional capacity for the demand generated by the project and will not otherwise induce growth.

The City of Long Beach Ruth Bach Library does not currently meet the City's goal of providing 2.1 items per capita. Therefore, the increase in the residential population of the Library's service area resulting from the proposed project will further reduce the number of items available, resulting in approximately 1.34 items per person. In addition, the project will further reduce the amount of floor area per person at the Ruth Bach Library from 0.218 square feet per resident to approximately 0.19 square feet per resident, which is less than the City's goal of 0.25 square feet per resident. The City of Long Beach Public Library has indicated that a workload increase at the Ruth Bach Library will be necessary and that the book collection at this Library will have to be expanded proportionally to meet the items per capita goal. Therefore, the project will result in a necessary expansion of existing library services in the City of Long Beach. However, as this expansion is to account for existing demand and the additional demand generated by the project, it will not serve to induce growth.

The portion of the proposed project within the City of Lakewood does not include any residential units. Furthermore, while employees within the project site could periodically use library facilities in the area, given the availability of on-line resources and in-house office materials, impacts associated with daytime use of City of Lakewood library facilities by project employees will not be significant and facilities will not have to be expanded.

Although the project includes the development of on-site open space and recreational areas, the increase in the residential population discussed above will decrease the existing parkland to population ratio. Since the project is required to contribute fees for parks and recreation facilities, the project will not result in an indirect impact to parks. Furthermore, as the area surrounding the project site is largely built out, any expansion to the park system in the area resulting from demand generated by the project and related projects will serve existing residents rather than induce new residents to move to the area.

3. INFRASTRUCTURE

The PacifiCenter site is currently developed and is located in an area where adequate infrastructure is in place to serve the existing demand. However, the project will upgrade some of the existing infrastructure, including storm drains, water systems, and street improvements, as well as the potential construction of a new 66-Kv substation. While these improvements will be provided to ensure that adequate capacity will be available to accommodate future development of the project site, such upgrades may provide capacity in excess of projected demand. The substation in particular will provide demand that will serve the needs of more than just the project site. However, the excess capacity that may be provided will not be to such a degree so as to allow for more construction in the service area. Furthermore, the surrounding area is almost entirely built out, so additional capacity will serve the reasonably anticipated growth in the area rather than induce growth that would otherwise not occur.

4. CONCLUSION

In conclusion, implementation of the PacifiCenter project will, both directly and indirectly, contribute to the growth of the area surrounding the site. However, as a development project occurring in a built out area, the project will result in beneficial impacts related to growth. Furthermore, growth associated with the project will be consistent with the General Plans of the Cities of Long Beach and Lakewood and the City

of Long Beach 2010 Strategic Plan. Accordingly, growth generated by the PacifiCenter project will contribute to the overall enhancement of the area as a vibrant and successful urban center.